Config Topics

Basic Router Config Includes:

- hostname

- banner

- password encryption

- passwords (enable, con and vty)

- logging synchronous

- exec-timeout

- no ip domain-lookup

- interface addressing and descriptions

  Static Routes

  Default Routes

  ipv 4 Static Routes

  IPv4 Default Routes

  RIPv2

  Router on a stick

  interface int-id.subint-id

  encapsulation dot1q vlan-id

  encapsulation dot1q vlan-id native

  ip address ip-address subnet-mask

  no shutdown

  interface GigabitEthernet0/0
  ip access-group 10 in

access-list 10 permit 192.168.1.0 0.0.0.255
access-list 10 deny any

Extended ACL (filters by source + destination IP, port, protocol)

interface GigabitEthernet0/1
ip access-group 10 in

access-list 100 permit tcp 192.168.1.0 0.0.0.255 any eq 80
access-list 100 deny ip any any

Named Extended ACL

ip access-list extended WEB_TRAFFIC
permit tcp 192.168.1.0 0.0.0.255 any eq 80
deny ip any any
!
interface GigabitEthernet0/1
ip access-group WEB_TRAFFIC in

show access-lists
show ip interface [interface_name]
show running-config | include access-list

ip access-list standard RESTRICT-OUTSIDE-COMM
remark restrict communication with outside world to only the PR subnet
permit 172.25.126.0 0.0.0.255

Standard ACLs - Configure and Verify

2.3.2.7 Lab - Configuring Basic PPP with Authentication

- 3.2.2.7 Lab - Configuring a Router as a PPPoE Client for DSL Connectivity
- 3.4.2.6 Lab - Configuring a Point-to-Point GRE VPN Tunnel

- 4.2.2.13 Lab - Configuring and Verifying Extended ACLs

- 4.3.2.6 Packet Tracer - Configuring IPv6 ACLs

  Implement local span

  config snmp

  BGP config

  Branch Connection

  Quality of Service

  - 7.10.10.1 Packet Tracer - Configuring Static NAT

  - 7.10.10.2 Packet Tracer - Configuring Dynamic NAT

  - 7.10.10.3 Packet Tracer - Implementing Static and Dynamic NAT

- IP SLA

Basic Switch Config Includes:

- hostname

- banner

- password encryption

- passwords (enable, con and vty)

- logging synchronous

- exec-timeout

- no ip domain-lookup

configure terminal

interface vlan 99

ip address 172.17.99.11 255.255.255.0

no shutdown

end

duplex auto

speed auto

mdix auto

vlan

switchport mode access

switchport access

switchport voice

Remote Management & Access Port Security

ip domain-name cisco.com
crypto key generate rsa

```
username admin secret ccna
line vty 0 15
transport input ssh
login local
exit
ip ssh version 2
exit
```

Switch Access Port Security

Syslog and NTP

CDP and LLDP

NTP-Syslog-CDP

Secure Network Admin and IPv6

Configure switch ports and trunk ports to be assigned to a VLAN based on requirements.
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Configure and verify basic EIGRP operations for IPv4 and IPv6

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Configure EIGRP automatic and manual summarization.
Configure a router to propagate a default route in an EIGRP network.
Modify EIGRP interface settings to improve network performance

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Configure a router to propagate a default route in an EIGRP network.
Modify EIGRP interface settings to improve network performance.

Configure and modify OSPF interface settings to improve network performance.

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Troubleshoot missing route entries in single-area OSPFv2 and OSPFv3 route tables.

Troubleshoot single-area OSPF implementation

copy running-config startup-config